

WHAT IS CLAIMED IS:

(1) A vehicle data acquisition and display assembly comprising:

at least one image acquisition apparatus which is
5 disposed upon a vehicle and which acquires images of the environment in which said vehicle resides;

a video processing assembly which is coupled to said
at least one image acquisition apparatus, which receives
said acquired images, and which uses said acquired images
10 to create a mosaic image of said environment;

a display which is coupled to said video processing
assembly, which is disposed within said vehicle, and
which selectively displays at least one portion of said
mosaic; and

15 an image control assembly which selects said at least one portion, thereby allowing said at least one portion of said mosaic to be selectively displayed by said display assembly.

(2) The vehicle data acquisition and display assembly of
20 claim 1 wherein said image acquisition apparatus comprises a camera.

(3) The vehicle data acquisition and display assembly of
claim 1 wherein said vehicle has at least one attribute
and wherein said assembly selectively monitors said at
25 least one attribute and, in response to said monitored attribute, generates a certain signal which is effective

to cause a second portion of said mosaic to be displayed by said display assembly.

5 (4) The vehicle data acquisition and display assembly of claim 1 wherein said vehicle is selectively maneuvered and wherein said assembly senses said maneuvering of said vehicle and, in response to said sensed maneuvering, causes a third portion of said mosaic to be displayed by said display assembly.

10 (5) The vehicle acquisition and display assembly of claim 4 further comprising a voice activated control assembly which selectively receives at least one voice command and which selectively causes a fourth portion of said mosaic to be displayed in response to said at least one voice command.

15 (6) The vehicle data acquisition and display assembly of claim 1 further comprising:

at least one lens cover; and

a lens cleaning assembly which selectively cleans said at least one lens cover.

20 (7) The vehicle data acquisition and display assembly of claim 6 wherein said lens cleaning assembly includes a source of compressed air; and a valve which selectively allows said compressed air to be applied to said at least one lens cover.

25 (8) The vehicle data acquisition and display assembly of claim 7 wherein said lens cleaning assembly further

includes a source of a cleansing agent which is selectively and concomitantly mixed with said applied compressed.

5 (9) The vehicle data acquisition and display assembly of claim 8 wherein said cleansing agent is warmed before it is mixed with said applied compressed air.

10 (10) The vehicle data acquisition and display assembly of claim 1 further comprising an audio assembly which selectively generates certain audio signals which describe said at least one portion of said mosaic.

(11) An assembly for use with a vehicle of the type having a roof, said assembly comprising:

15 a plurality of cameras which are disposed upon said roof and which cooperatively provide images of the environment in which said vehicle resides;

a display assembly which selectively said cooperatively provide images; and

20 a controller having a touch sensitive surface upon which an icon is disposed, said controller selecting a first portion of said cooperatively provided images by use of said touch sensitive surface and causing said selected first portion of said cooperatively provided images to be displayed by said display assembly.

25 (12) The assembly of claim 11 wherein each of said cameras have an image acquisition surface which is substantially coplanar with a portion of said roof.

(13) The assembly of claim 12 wherein said cooperatively provided images include a first image which represents a first portion of the environment which is relatively far from said vehicle and a second image which represents a second portion of said environment which is relatively close to said vehicle, said controller selecting said first image to be displayed upon said display assembly when said controller is touched at a point which is relatively far from said icon and selecting said second image to be displayed upon said display assembly when said controller is touched at a second point which is relatively close to said icon.

(14) The assembly of claim 13 wherein said icon comprises an image of a vehicle.

(15) The assembly of claim 10 further comprising a voice recognition module which causes said first portion of said cooperatively provided images to be displayed by said display assembly in response to a receipt of a certain voice command.

(16) The assembly of claim 14 further comprising an audio generator which selectively generates certain sounds which are based upon said certain portion of said cooperatively provided images.

(17) A method for acquiring and selectively displaying images to be viewed within a vehicle, said method comprising the steps of:

providing a plurality of cameras;
disposing said plurality of cameras upon said
vehicle, effective to acquire said images;
providing a display;
5 disposing said display within said vehicle,
effective to selectively display at least a portion of
said images;
generating a voice command; and
using said voice command to select said at least a
10 portion of said images.

(18) The method of claim 16 further comprising the steps
of:

providing a source of air;
disposing said source of air within said vehicle;
15 generating a second voice command; and
causing air to be applied to at least one of said
plurality of cameras by use of said generated second
voice command.

20 (19) The method of claim 17 wherein each of said cameras
are substantially identical.

(20) The method of claim 18 further comprising the steps
of:

providing a cleansing agent;
heating said cleansing agent;
25 mixing said air with said heated cleansing agent;
and

applying said mixture of said air and said heated
cleaning agent to said at least one of said plurality of
cameras.